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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,957	03/15/2004	Athanasios Athanasiou	2001P1437WOUS	2354
46726	7590	07/27/2006	EXAMINER	
JOHN T. WINBURN 100 BOSCH BOULEVARD NEW BERN, NC 28562			JIANG, CHEN WEN	
			ART UNIT	PAPER NUMBER
			3744	
DATE MAILED: 07/27/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/801,957

Applicant(s)

ATHANASIOU ET AL.

Examiner

Chen-Wen Jiang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 15-20 is/are rejected.
- 7) ☒ Claim(s) 10-14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/9/2006 has been entered.

Specification

2. Applicant is reminded to verify the dependence of claims 16-18.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1,2,3,4,5,6,9,16,17 and 18 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Cowans (U.S. Patent Number 5,802,863) in view of Gowan (U.S. Patent Number 5,343,712).

Cowans discloses a system and method for refrigerating wine. In regard to claims 1, the system comprises a refrigerated load compartment 16, wine bottles 18, compressor 28, condenser 30, evaporator 34 and microcontroller 22 with cool down model. A separate storage 72, which provides a number of cool down models for reference to the microcontroller 22 enables the

microcontroller 22 to have ready reference to predetermined control conditions. Referring to Fig.4, the cool down model comprises the desired temperature and cool down rate.

In regard to claims 2 and 3, Fig.4 presents the course of monotonic fall and at a constant rate on average until the desired temperature.

In regard to claims 4 and 16, Gowan discloses a number of steps with a constant level during that step which can be used for the prescribed module of Cowans.

In regard to claim 9, Cowans discloses an output port 108 coupled to the RS-232 interface 97 enables communication to an output device, such as a computer or display.

In regard to claims 5,6,17 and 18, Cowans discloses the controller with select-desired temperature range and cool down rate. The user interface is inherent in the system since the user can select the temperature range.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 7,8,15,19 and 20 rejected under 35 U.S.C. 103(a) as being unpatentable over Cowans (U.S. Patent Number 5,802,863) in view of Gowan (U.S. Patent Number 5,343,712).

Cowans discloses the invention substantially as claimed. Cowans is silent about temperature sensor within the interior space although the temperature is shown in Fig.4. The temperature can be directly measured or calculated and is design choice. Gowan discloses the directly measuring the temperature. However, Cowans does not disclose the cooling rate is

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between 0.5 and 3 K/h. Gowan discloses the cooling rate is about 0.7 K/h (Fig.3) in the same field of endeavor for the purpose of gradually cooling wine. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the apparatus of Cowans with a cooling rate between 0.5 and 3 K/h in view of Gowan so as to achieve the desired cooling rate for wine. Under the principals of inherency, if a prior art device, in its normal and usual operation, would necessarily perform the method claimed, then the method claimed will be considered to be anticipated by the prior art device. When the prior art device is the same as a device described in the specification for carrying out the claimed method, it can be assumed the device will inherently perform the claimed process. *Ir re King*, 801 F.2d 1324, 231 USPQ 136 (Fed. Cir. 1986).

7. Claims 1-9, and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gowan (U.S. Patent Number 5,343,712) in view of Cowans (U.S. Patent Number 5,802,863).

In regard to claims 1-6,9 and 16-18, Gowan discloses a temperature controller for facilitating the storage of wine. Referring now to Figs. 1 and 2, a temperature controller 10 for converting a refrigeration unit 12 of the type including an electrically powered chiller 14, a chilled compartment 16, user actuated temperature selecting means 26, temperature display means 30 and a thermostat 18 for controlling operation of the chiller 14. During the cooling intervals, the temperature of the chilled compartment is lowered to the user-selected temperature in stages. Fig.3 illustrates the sensed temperature of a chilled compartment 16 versus time. This Figure presents the steps (I_1 , I_2 , ...) with a constant level during that step. Gowan also discloses an overriding means to enables and disables the cooling system. The temperature controller may be used for wine storage temperature and wine serving temperature. However, Gowan does not

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disclose the stages are prescribed. Cowans discloses prescribed cool down models in the same field of endeavor for the purpose of having prescribed temperature stepwise. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to replace prescribed override means of Gowan with a prescribed cooling courses in view of Cowans so as to have prescribed cool down module instead prescribed power off module.

In regard to claims 7,8,15,19 and 20, Gowan discloses the sensed temperature of the chilled compartment versus time and the cooling rate is about 0.7 K/h.

Allowable Subject Matter

8. Claims 10-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chen-Wen Jiang whose telephone number is (571) 272-4809. The examiner can normally be reached on Monday-Thursday from 8:00 to 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on (571) 272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Chen-Wen Jiang
Primary Examiner

